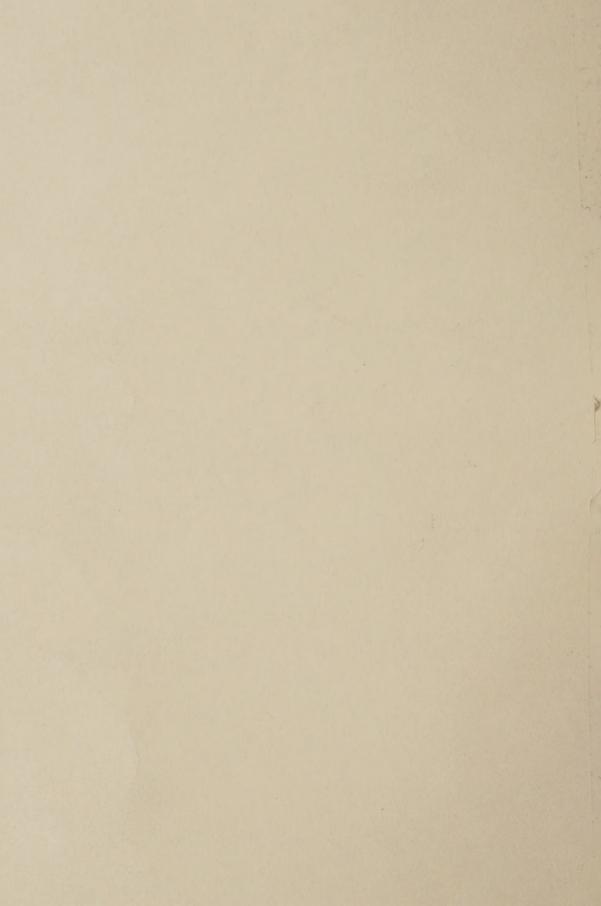
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Gro. g. Ball
IN C.
WEST CHICAGO
ILLINOIS



BETTER MUMS FOR 1942

Our Annette admiring Indianapolis White.

NOTE—PLEASE

While our equipment and stock for supplying mum cuttings is improved annually as it should be, we strongly urge the importance of PLACING ORDERS EARLY. While we watch the behavior of varieties, especially the newer ones, and the market demands in all parts of the country, it is impossible to accurately anticipate varieties that will be most wanted.

This results in unexpected demands and shortages of some varieties. For this reason, get your mum list in early as you can, bearing in mind that all orders are filled in the rotation received. We will not make exceptions to this rule.

We insist on thoro State inspection of all our propagating stock, especially for midge. This enables us to guarantee all stock furnished by us to be clean, free of disease or insects, well rooted, and carefully packed.

GEO. J. Ball, Inc.

INSTRUCTIONS FOR ORDERING

NOTE: When arrangements are made to ship cuttings on open account, it is understood they are sold on strictly 60 days net basis. The close margin under which these cuttings are sold, makes these terms necessary.

SPECIAL EARLY ORDER DISCOUNT. When an order is placed two months, or more, in advance of delivery date, a discount of 5% is allowed, provided delivery date is April 1st, or later. Be sure to show on your order, date cuttings are to be shipped.

or later. Be sure to show on your order, date cuttings are to be shipped.

Special Discounts for Large Orders: The following discounts, for quantities given, will apply on orders placed at one time for the quantity on which discount is taken.

or later. Be sure to show on your order, date cuttings are to be shipped. 5% discount for an order of 10,000 apply on orders placed at one time for the quantity on which discount is taken.

Rate per 100 Rate per 10 Rate per 100 Rate per 10 \$ 3.25 \$.50 \$ 7.00 \$1.25 Please note schedule at right showing rates per 100 and corresponding rates per 10. We do not supply .50 1.50 4.00 8.00 5.00 1.00 10.00 1.50 less than 10 of any variety, except 6.00 1.00 12.00 2.00 15.00 2.50 first year Novelties.

VERY IMPORTANT In order to produce cuttings at present prices, the business is run on a very close margin. For this reason we cannot break bundles of 25 cuttings as it adds considerable to the cost.

Please note, therefore, following rule will apply on all orders:

When less than 25 of a variety is ordered they will be billed at the ten rate, as per table shown above.

If order totals less than 1000, 25 of a variety will be billed at the 100 rate.

When more than 25 of a variety is ordered quantity MUST BE IN MULTIPLES OF 25, (meaning 50, 75, or 100).

250 of one variety will be billed at the 1000 rate.

PLEASE NOTE If your order should total 900 cuttings (for example: 100 each of 9 varieties at \$3.25, total is \$29.25) while if 1000 are ordered, the thousand rate would apply. This point should be watched in figuring your order so that you may have advantage of the thousand rate on the entire order. WATCH THIS.

If order is wanted C.O.D. be sure to enclose check for at least 50% of the amount.

SHIPPING INFORMATION All our stock is propagated at Barberton, Ohio, from where it is shipped by Express COLLECT.

If cuttings are wanted by Parcel Post, add sufficient postage as all prices are figured F.O.B. Barberton, Ohio. Approximate weights of cuttings are as follows: 50 cuttings, 2 lbs.; 100, 4 lbs.; 500, 15 lbs.; 1000, 24 lbs. You can secure the amount of postage necessary from your local Post Office.

ABOUT NEW PRICES In considering prices we insist that the first thot must be maintaining quality. Poor, more or less diseased, stock is costly at any price. It is needless to say the cost of producing good, clean stock is up around 15%. It is clearly impossible for the propagator to absorb this and maintain quality. We feel sure under these circumstances that the 9% increase in effect this season will be considered reasonably justified.

MUMS FOR '42

THAT FRONT COVER

is of our Annette admiring Indianapolis White. We have high regard for this last season's introduction. At its best with us about Mid-November after the heavy over-supplies of around November 1st are past. Identical in habit to Indianapolis Pink.

Regardless of war conditions all indications point to an active business situation thruout 1942 at least. This means that we can look forward to profit in uniformly well grown beds of mums.

When properly managed there is a margin of profit in this crop. Our cost accounting clearly shows this. But if such details as timely planting, spacing, soil, midge, and varieties are not properly attended to, the profit margin can quickly disappear—might

even turn into a substantial loss. To make a profit they must not be treated as a catch crop. When a lot turns out to be a loss, as does happen with us at times, the reason can usually be traced back to a preventable cause,—late planting, weak or diseased spots in the bed, or midge. When we have to fight this pest all summer we don't sometimes realize the cost in time and material that it is piling up against the crop. The use of improved varieties does frequently make the difference between profit and loss. If you are skeptical on this, just remember that real improvements are coming out annually and that live growers are watching for them: and that on an open market the variety that is just a little better sells first: any experienced shipper knows what that can mean to returns. True, a new variety might occasionally be gotten that doesn't click as well with us as with the originator; but it is our experience that many failures with new ones is due to inferior culture.

Another cost item that might easily be overlooked, without a cost finding system, is that of young stock. It is a fact that many large growers who figure costs and the advantages of having their cuttings delivered the day planned for them are ordering their mum cuttings thru this catalog. When mums are propagated early, planted out or potted, and topped and again planted in May or June, they have run up a substantial cost, but the heaviest is the fact that such stock will not usually start off and continue growing as free as cuttings right out of the sand—delivered the day you want 'em: besides planting cuttings directly reduces labor costs to a minimum, and to make a profit on mums or any crop, every cost must be studied. Uniformly good quality is of first importance but it means nothing if it doesn't leave you a margin. Whether your requirements are 10 or 100,000, we want to hear from you.

Grog Ball

THE 1942 NOVELTIES

The following new varieties are only from responsible growers. Such growers will not release a new one that isn't an improvement over an existing kind. We realize that not all new ones make good. This might sometimes be due to a variety not behaving everywhere as it does with the originator, but more often the grower's cultural methods are faulty. An example is the 50 year old variety Bonnaffon that many veteran growers have discarded and taken up numerous times. All the following are improvements, so better try out such types or colors in which you are most interested. Cuttings of all the following introductions are guaranteed free of verticillium infection.

Prices on Cuttings of all Novelties listed on this and following page \$15.00 per 100—\$125.00 per 1000

De Petris Introductions

CAMBRIA

A free growing commercial variety of average size. Form very closely incurved. Color intense, golden bronze with a metallic sheen. Strong wiry stem and small foliage which seems to fill out and stiffen as the flowers mature. It is very easy to grow and quite resistant to disease. Produces two blooms to the plant very uniformly. Blooms possess excellent substance and ship extremely well. An excellent and profitable variety for both wholesale and retail grower. Matures Oct. 25th.

PENROD

Medium-sized pernet yellow. Very fine incurved form similar to the old variety Bonnaffon. Possesses good substance giving the variety good keeping as well as good shipping qualities. A free and easy grower with good stem and foliage. Will produce three blooms per plant with remarkable uniformity. A very attractive looking variety that should be useful to growers desiring moderate size together with excellent form and good substance. Matures Nov. 10th but can be easily held for a week later.

EUROPA

An intense cardinal red single of outstanding brilliance and exceptional substance. It may be grown either as a single disbud or as a disbudded spray. The color improves any existing red single. A very brilliant red on the inside of the petal and a gold on the reverse. Europa might be said to mark an epoch in red singles. Its growth habit is medium in vegetativeness. It is fairly easy to grow.



PENROD. A pernet yellow; good commercial value.

The spray formation is stiff and rigid. It must be carefully spaced, carefully pruned and accurately disbudded. We believe it will well repay any man who will give it this kind of cultural treatment. Matures Nov. 5th.

ORANGE BELLE

Small flowered Pompon with good form and substance. Color reddish orange rust. Very free growing habit with small but very persistent foliage. Good spray formation on wiry stems which attain a good length. This variety is outstanding in growth and the attractiveness of its clean stems and foliage. We believe this will prove a profitable variety for the grower. Matures in late November and early December



EUROPA. A brilliant Cardinal red single.

Yoder's Introductions (Seedlings) CAMEO

An ivory Pompon of unusual size and substance that blooms the same time as Yuletide, Cordova and Silver Star. A strong persistent grower possessing a rigid and well spread spray. The growth habit is superior to any worth while variety in its color class and blooming season. The flower is large and of an attractive form. It should be the answer to the grower who demands a white or cream Pompon for early December that will provide him with quality, production and reliability. Matures December 5.

SONATA

A very brilliant orange bronze single. The flower has a starlike appearance that enhances the beauty of any design, basket or bowl into which it is placed. The color is brilliant to the last; its keeping qualities are unusually good. Its growth habit is decidedly vegetative. It is a very easy doer, a heavy producer and it is very popular with the retail trade. Plant early on raised benches; last pinch August 1st. Matures December 5.

MATADOR

A rich red Anemone of large size and after the style of Crimson Glow. It improves that variety in every respect. The growth habit somewhat resembles that of Valencia except that it is not so vegetative. The stems are stiff and straight with the flower held rigidly and erect. The form is excellent, color is very bright and vivid. For disbudded sprays plant 7x8; pinch July 25th; grow 2 stems; 3 flowers per stem. As a single disbud, plant 7x8, last pinch August 5th; grow 3 stems. Matures December 5.

ROSALIND

A pink single that might be described as Pink Yukon. The color is a clean medium pink. The growth habit is excellent; a very free grower; medium sized stem and foliage; no tendency to blindness; it flowers at a time of the year when pink is scarce. It appears to do almost equally well under either ground bed or raised bench environment. Matures Dec. 20.

AMBERLITE

A bright orange bronze single of excellent substance and easy culture. It is a good producer and a strong persistent grower that is not exacting in its cultural requirements. Does not require disbudding; best in natural sprays. Do not over crowd; plant 7x8; grow 2 stems. Matures November 25.

Yoder's Sports

YELLOW SNOW

A bright pernet yellow sport from Snow. The form and growth habit are identical with the original. Because of its season, December 30th, heavy production and excellent color this variety will prove to be one of the most valuable additions to the late Pompons.

BRONZE PROSPERITY

A deep orange bronze sport from Prosperity. The color is excellent. Growth is identical with that of Prosperity. Best grown on raised benches, or if in ground beds, plant early. Last pinch July 20th. Matures December 10.

RED BRISTOLITE

A good red sport from Bristolite. Red Bristolite is better as a red than Bristolite is as a bronze. The size, form and substance are excellent. Growth is sparse but persistent. It must be planted close to secure production. Use soft cuttings, clean rich soil; preferably ground beds. Pinch once about July 25th. Plant 5x8; grow 2 stems. Matures November 25.

BETTER MUMS FOR 1942 FROM - G

Grog Ball

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NOTE: These 2 index pages showing names of all varieties of mums with page numbers are for use in locating any certain variety as it is arranged alphabetically, while in the regular listing of varieties they are all arranged in order of blooming dates. Please do not include any varieties in your order that are not in this list, as we can furnish only what is listed in this catalog.

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Large Flowering Commercial Varieties

In this catalog is a duplication of names as follows:

December Glory—A large mum.

December Glory—A pompon.

When this variety is ordered, kindly specify clearly which is intended.

NOTE

When variety Gladys Pearson is ordered, original stock will be shipped. When Dark Bronze Gladys Pearson is requested, Oak Leaf will be shipped. Under Hardy Chrysanthemums we have listed variety "Amelia." This is identical with variety "Pink Cushion."

X-Extra good or generally accepted best varieties.

S-Indicates varieties we find most suitable for shading.

P-Indicates varieties suitable for Pot Plants.

*-Indicates varieties resistant to Verticillium blight.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

YELLOW

		Select			ce per
Name and Description	Height	Bud	Matures	100	1000
P Gold Lode. Golden yellow		Aug. 25	Oct. 1	\$3.25	\$30.00
Golden October. Rich golden yellow. Semi-in-					
curved	Med.	Aug. 25	Oct. 10	3.25	30.00
XP Celestra. Bright yellow		Ter. Bud	Oct. 15	3.25	30.00
XSP* Mrs. H. E. Kidder. Bright yellow	Med.	Aug. 25	Oct. 20	3.25	30.00
X Yellow Ambassador. Yellow. Sport from Am-		T D .	0 . 25		20.00
bassador	Med.	Ter. Bud	Oct. 25	3.25	30.00
X Blazing Gold. Golden yellow	Med.	Ter. Bud	Oct. 25	3.25	30.00
XSP Sunglow. Yellow		Aug. 25 Aug. 31	Oct. 25 Oct. 28	3.25	30.00
*Citronella. Light yellow		Ter, Bud	Nov. 1	8.00	75.00
XSP* Golden Glory. Golden yellow		Aug. 25	Nov. 1	3.25	30.00
XS* Good News. Yellow. Sport from Detroit News		Aug.30	Nov. 1	3.25	30.00
XP Cardonia. Deep rich yellow		Sept. 5	Nov. 10	3 25	30.00
X Whittier. Yellow		Sept. 15	Nov. 13	3.25	30.00
X Yellow Monument. Yellow. Sport from Monu-		000			
		Sept. 10	Nov.15	3.25	30.00
XP* Honey Dew. Yellow	Short	Ter. Bud	Nov.15	3.25	30.00
Jubilee. Clear Bonnaffon yellow	Short	Ter. Bud	Nov.15	3.25	30.00
X Yellow Mefo. Yellow. Sport from Mefo	Tall	Sept. 20	Nov. 20	3.25	30.00
XP* Friendly Rival. Large golden yellow		Sept. 10	Nov. 20	3.25	30.00
X Marie de Petris. Yellow	Short	Sept. 15	Nov. 23	3.25	30.00
XS Golden Pearson. (Leroy Zang) Yellow. Spor			7	The sale	
from Gladys Pearson		Sept. 30	Nov. 25	3.25	30.00
XP Sun Gold. Yellow	Med.	Sept. 30	Nov. 25	3.25	30.00
Golden Chadwick. Yellow	Med.	Ter. Bud	Nov. 25	3.25	30.00
X Improved Yellow Chattanooga. Light yellow	Med.	Sept. 20	Nov. 25	3.25	30.00
P R. M. Calkins. Golden yellow		Sept. 20	Nov. 30	3.25	30.00
X Golden Mrs. Ross. Golden yellow. (Improved		Tou Dud	Dec. 3	3.25	30.00
Nellie T. Ross.) X Golden Mistletoe. Yellow	Tall	Ter. Bud Sept. 30	Dec. 10	3.25	30.00
Meteore. Lemon. Yellow. Incurved	Med.	Ter, Bud	Dec. 10	12.00	100.00
X Improved Tobin's Late Yellow. Deep yellow		Ter. bud	Dec. 10	12.00	.00.00
Sport from Tobin's Late Yellow		Sept. 30	Dec. 15	3.25	30.00
Smith's Early White. White		Aug. 10	Oct. 5	3.25	30.00
77110					

Large Flowering Commercial Varieties (Continued)

WHITE

		Select		Pric	e per
Name and Description	Height	Bud	Matures	100	1000
XP Quaker Maid. White	Med.	Aug. 25	Oct. 15	3.25	30.00
XS Silver Sheen. Standard early white		Aug. 30	Oct. 18	3.25	30.00
XP Ambassador. Large long stemmed white	Med.	Ter. Bud	Oct. 23	3.25	30.00
Albatross. Pure white		Ter. Bud	Nov. 1	3.25	30.00
XS Snow White. White		Ter. Bud	Nov. 1	3.25	30.00
XS* Betsy Ross. Finely shaped white	Tall	Aug. 25	Nov. 1	3.25	30.00
X Chas. W. Johnson. A standard white		Sept. 10	Nov. 5	3.25	30.00
Indianapolis White. Incurved	Med.	Ter. Bud	Nov. 8	8.00	75.00
Jean Elizabeth. Creamy white		Ter. Bud	Nov. 15	8.00	75.00
X Monument. White		Sept. 10	Nov. 15	3.25	30.00
XS Marketeer. Finest late white		Ter. Bud	Nov. 18	3.25	30.00
X Mefo. White		Sept. 20	Nov. 20	3.25	30.00
P White Frick. White. Sport from Helen Frick	Short	Sept. 10	Nov. 25	3.25	30.00
X Chattanooga. White		Sept. 20	Nov. 25	3.25	30.00
X White Chadwick. White		Ter. Bud	Nov. 25	3.25	30.00
Frigida. Incurved		Ter. Bud	Dec. 1	12.00	100.00
X December Glory. White	Tall	Sept. 30	Dec. 1	3.25	30.00
Improved December Beauty. Pure white. Sport		0001.00			
from December Beauty	Med	Oct. 1	Dec. 8	3.25	30.00
X White Mistletoe. White		Sept. 30	Dec. 10	3.25	30.00
XP Smith's Late White. White		Sept. 30	Dec. 15	3.25	30.00
The second of th	311011	Jept. 30	200. 19	JJ	50.00
PROMITE	6. D	ED			
BRONZE	GK	ED			
P Bronze Lode. Light bronze. Sport from Gold					
Lode	Med.	Aug. 25	Oct. 1	3.25	30.00
XS* Indianola. Light bronze		Aug. 25	Oct. 10	3.25	30.00
SP* Hilda Bergen. Bronze		Aug. 25	Oct. 25	3.25	30.00
Alameda. Reddish bronze with buff reverse.		, .ug. 25			
Incurved	Short	Ter. Bud	Oct. 25	8.00	75.00
XP Glitters. Bright bronze		Ter. Bud	Oct. 28	3.25	30.00
XP Apricot Queen. Orange bronze		Sept. 5	Nov. 1	3.25	30.00
XS Detroit News. Finest early bronze	Med.	Aug. 30	Nov. 1	3.25	30.00
X Indianapolis Bronze. Buff bronze suffused with	Trica.	7 lug. 50	1107. 1	3.23	30.00
pink. Incurved	Med.	Ter. Bud	Nov. 8	6.00	50.00
X Mrs. David F. Roy. Crimson with bronze re-	mica.	101. 540	. 101. 0	0.00	30.00
verse	Short	Sept. 15	Nov. 8	3.25	30.00
Indian Chief. Deep reddish bronze; golden buff	311011	3cp1. 13	. 101. 0	3.23	30.00
reverse	Med.	Sept. 5	Nov. 10	3.25	30.00
Mrs. A. J. Stahelin. Bronze with reverse petals,	rrica.	Jept. J	1101.10	3.23	30.00
yellow	Med	Ter. Bud	Nov. 15	3.25	30.00
XP Garnet King. Deep, bright red		Sept.20	Nov. 18	3.25	30.00
Gladys Pearson. Good light bronze		Sept. 30	Nov. 25	3.25	30.00
X Oak Leaf. Dark bronze		Sept. 30	Nov. 25	3.25	30.00
XP Bronze Frick. Bronze. Sport from Helen Frick		Sept. 10	Nov. 25	3.25	30.00
P Harvard. Crimson		Sept. 30	Nov. 30	3.25	30.00
X Mohawk Chief. Crimson		Oct. 1	Nov. 30	3.25	30.00
X Bronze Mistletoe. Bronze		Sept. 30	Dec. 10	3.25	30.00
A Diolize Mistietoe. Diolize	MIEG.	3ept. 30	Dec. 10	3.23	30.00
max.					
PIN	1K				
Lustre. Pink	Short	Aug. 25	Oct. 10	3.25	30.00
XS Pink Chief. Pink		Ter. Bud.	Oct. 15	3.25	30.00
SP Justrite. Pink		Ter. Bud.	Oct. 15	3.25	30.00
XS Rose Glory. Pink		Ter. Bud	Oct. 20	3.25	30.00
* Major Ed. Bowes. Pink, Medium length stem.		Aug. 30	Oct. 20	3.25	30.00
X October Rose. Pink		Sept. 5	Oct. 20	3.25	30.00
Rosabella. Rose pink. Incurved		Ter. Bud	Oct. 25	6.00	50.00
Roseum. Deep lavender. Incurved		Ter. Bud	Nov. 1	12.00	100.00
XSP*J. W. Prince. (Improved Chieftain) Light pink		Aug. 30	Nov. 5	3.25	30.00
X Indianapolis Pink. Excellent light lavender.	311011	/ lag. 50	1404.)	3.23	30.00
Darker reverse	Med	Ter. Bud	Nov. 8	3.25	30.00
Durker reverse	med.	rei. bud	1404. 0	3.23	30.00
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Large Flowering Commercial Varieties

PINK (Continued)

	Name and Description	Height	Select Bud	Matures	Price 100	per 1000
x	Orchid Queen. Orchid pink	Med.	Ter. Bud	Nov. 15 Nov. 20	3.25 3.25	30.00
	Peter John. Light pink. Sport from Thanks-aiving pink		Sept.15	Nov. 23	3.25	30.00
P	Thanksgiving Pink. Dark pink	Short	Sept.15 Ter.Bud	Nov. 23 Nov. 25	3.25 3.25	30.00
XP	Helen Frick. Pink		Sept. 10 Sept. 15	Nov. 25 Nov. 30	3.25 3.25	30.00
X	Pink Mistletoe. Pink	Med.	Sept. 30	Dec. 10	3.25	30.00

Exhibition Varieties

YELLOW

		-						
	Yellow Turner. Yellow		Select Bud Aug. 25		100 \$6.00			
Х	Yellow Pockett. Yellow		Aug.15	Nov. 8	8.00	75.00		
	William Turner. White		Aug. 25 Aug. 15	Nov. 5 Nov. 8	6.00 8.00	50.00 75.00		
	BRONZE	& R	ED					
х	Grace Sturgis. Wine red with pinkish-silver reverse	Tall Short Med.	Aug. 25 Aug. 25 Aug. 25 Aug. 15	Nov. 1 Nov. 1 Nov. 5 Nov. 5	6.00 8.00 6.00 6.00	50.00 75.00 50.00 50.00		
	PINK							
X	Pink Turner. (Mrs. Leslie Davis) Pink Thos. W. Pockett. Pink Vermont. Pink Dark Pink Thos. Pockett. Lavender	Med. Tall	Aug. 25 Aug. 15 Aug. 25 Aug. 15	Nov. 5 Nov. 8 Nov. 8 Nov. 8	6.00 8.00 8.00 15.00	50.00 75.00 75.00 125.00		

Odd Formed--Feathery and Threadlike--**Varieties**

	Name and Description	Height	Select Bud	Matures	Pric	ce per 1000
	Golden Pride. Golden yellow	Short	Ter. Bud	Nov. 1	\$6.00	\$50.00
	Yamabuki. Yellow	Med.	Ter. Bud	Nov. 1	6.00	50.00
	Kay Tashima. White	Med.	Ter. Bud	Nov. 1	6.00	50.00
X	Ohkwan. Yellow	Med.	Ter. Bud	Nov. 1	6.00	50.00
	Butterfly. Yellow	Tall	Ter. Bud	Nov. 5	6.00	50.00
X	Peggy Ann Hoover. Quilled lavender	Short	Ter. Bud	Nov. 5	6.00	50.00
	Silver Drops. White	Short	Ter. Bud	Nov. 10	6.00	50.00
X	Yomei. Golden tube petals with red spoon end					
	tips	Med.	Ter. Bud	Nov. 10	6.00	50.00
X	Unique. Rich wine red	Tall	Ter. Bud	Dec. 1	6.00	50.00

Pompons, Single and Anemone Varieties

Types are abbreviated as follows: Pom.—Pompon; Dec.—Decorative; Sgl.—Single; Anem.—Anemone.

Size of flower is indicated by S-small; Int.-intermediate; L-large.

X-Extra good or generally accepted best varieties.

S-Indicates varieties we find most suitable for shading.

P-Indicates varieties suitable for Pot Plants.

D—Indicates smaller flowered varieties most suitable for growing as disbudded pompons.

*-Indicates varieties resistant to Verticillium blight.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

YELLOW

Size &

Price per

		Size &		Pri	ce per
Name and Description	Height	Type	Matures	100	1000
Yellow Irene. Light lemon yellow. Sport from		**			
		C D	0-4 10	62 25	620.00
Irene	Short	S. Pomp.	Oct. 18	\$3.25	\$30.00
XSP* Rodell Improved. Yellow. Sport from Rodell		Int. Pomp.	Oct. 20	3.25	30.00
XS Gold Finch. Yellow	Med.	Int. Pomp.	Oct. 20	3.25	30.00
XS* Golden Spray, Yellow		Int. Pomp.	Oct. 23	3.25	30.00
XPD Golden Herald. Large extra deep golden yellow		L. Dec.	Oct. 25	3.25	30.00
Cora Peck Buhl. Yellow		Int. Pomp.	Oct. 25	3.25	30.00
XS Yellow Dot. (Jablonsky) Yellow; reddish center			Oct. 25	3.25	
		Int. Pomp.			30.00
Yellow Daisy. Deep lemon yellow		Int. Sgl.	Oct. 25	3.25	30.00
XSD Mary Lennon Hall. Clear rich yellow		Int. Pomp.	Nov. 1	3.25	30.00
Yellow Arcadia. Pernet yellow	Med.	Int. Pomp.	Nov. 1	8.00	75.00
XD Yellow Sea Gull. Yellow. Sport from Sea Gull	Tall	Int. Pomp.	Nov. 1	3.25	30.00
D*Yellow Doty. Yellow	Med.	L. Pomp.	Nov. 1	3.25	30.00
XS Gretchen Piper, Lemon yellow	Med.	Int. Sal.	Nov. 1	3.25	30.00
			Nov. 1	3.25	
XD Yellow Blanche. Lemon yellow		Int. Anem.			30.00
XSP* Nuggets. Best early yellow		S. Pomp.	Nov. 5	3.25	30.00
Yellow Bushnell. Pernet yellow	Tall	Int. Pomp.	Nov. 8	8.00	75.00
X Derigold. Lemon yellow		Int. Pomp.	Nov. 10	3.25	30.00
XD Golden Mensa. Pale lemon yellow	Med.	Int. Sql.	Nov. 10	3.25	30.00
XD Helios. Deep yellow	Med.	L. Anem.	Nov. 10	3.25	30.00
XS Yellow New York. Yellow		S. Pomp.	Nov. 13	3.25	30.00
		Int. Pomp.	Nov. 15	3.25	30.00
X Golden Splendor. Bright yellow					
XSP* Yellow Fellow. Yellow		Int. Dec.	Nov. 15	3.25	30.00
XD*Sunny Boy. Yellow		Int. Sgl.	Nov. 15	3.25	30.00
X Sunray. Yellow	Med.	Int. Anem.	Nov. 15	3.25	30.00
XP Lois. Golden yellow	Med.	S. Pomp.	Nov. 18	3.25	30.00
XD Susanne Miller. Buff yellow	Tall	L. Anem.	Nov. 18	3.25	30.00
* Hasegawa Gold. Large golden yellow	Med.	Int. Pomp.	Nov. 23	3.25	30.00
XPD Yellow Rolinda. Light buff yellow	Med.	Int. Anem.	Nov. 23	3.25	30.00
D Goldsmith. Golden yellow		Int. Dec.	Nov. 25	8.00	75.00
X Golden Sceptre. Yellow	Tall	Int. Pomp.	Nov. 25	3.25	30.00
Sunbrite. Lemon yellow	Short	S. Anem.	Nov. 25	12.00	100.00
XD Citrus Queen. Lemon orange	Med.	L. Anem.	Nov. 25	3.25	30.00
PD Yellow Yuletide. Yellow	Short	Int. Pomp.	Nov. 28	3.25	30.00
X Christmas Gold. Bright yellow	Med.	S. Pomp.	Nov. 28	3.25	30.00
X Yellow Cordova. Yellow. Sport from Cordova	Med.	Int. Dec.	Nov. 30	3.25	30.00
		L. Sal.		3.25	30.00
XD Jane. Yellow. Sport from Valencia	Tall		Nov. 30		
XD Gold Coin. (Unalga) Yellow	Med.	Int. Pomp.	Dec. 1	3.25	30.00
XPD Yuvawn. Yellow	Med.	Int. Pomp.	Dec. 3	3.25	30.00
X Golden Modena. Deep golden yellow. Sport					
from Modena	Med.	Int. Pomp.	Dec. 5	3.25	30.00
X Fawn. Deep buff yellow	Med.	Int. Sal.	Dec. 5	4.00	37.50
XD Gleam. Deep lemon yellow	Med.	L. Anem.	Dec. 5	4.00	37.50
X Buttercup. Yellow	Tall	Int. Pomp.	Dec. 10	3.25	30.00
	Tun	int. Fomp.	Dec. 10	3.23	30.00
X Yellow Silver Star. Yellow. Sport from Silver	T 11	1 . D	D 10	2.05	20.00
Star	Tall	Int. Pomp.	Dec. 10	3.25	30.00



Price per

Pompons, Single & Anemone Varieties

YELLOW (Continued)

Size &

Name and Description	Height	Туре	Matures	100	1000
XD Yellow Supreme. Buff yellow. Sport from Pink					
Supreme	Med.	L. Anem.	Dec. 10	3.25	30.00
X December Gold. Deep golden yellow	Med.	Int. Dec.	Dec. 15	4.00	37.50
X Christmas Cheer. Deep yellow	Med.	Int. Pomp.	Dec. 15	3.25	30.00
X Yellow Garza Supreme. Yellow	Short Med.	Int. Anem. Int. Dec.	Dec. 15 Dec. 20	3.25 8.00	30.00 75.00
Vibrant. Deep yellow		Int. Pomp.	Dec. 25	8.00	75.00
Willesset. Lemon yenow	TTICG.	mt. romp.	DCC. 25	0.00	
WH	ITC				
ΥΥΠ	115				
* Uvalda. Creamy white	Med.	Int. Pomp.	Oct.10	3.25	30.00
XSP White Jewell. White suffused with pink	Short	S. Pomp.	Oct. 15	3.25	30.00
SD Silver Ball. White	Med.	L. Pomp.	Oct. 15	3.25	30.00
XSP* Irene. White	Short	S. Pomp.	Oct. 18	3.25	30.00
XS* Minong. White	Med.	S. Pomp.	Oct. 20	3.25	30.00
P*Silver Bells. White	Med.	S. Pomp.	Oct.23	3.25	30.00
XS Arcadia. Finest pure white	Med.	Int. Pomp.	Oct. 28	3.25	30.00
XPD Graceland. White, yellow center	Med.	Int. Anem.	Oct. 28	3.25	30.00
XSD*Sea Gull. White	Tall	Int. Pomp.	Nov. 1	3.25	30.00
XP* Mary Pickford. White	Short	S. Pomp.	Nov. 1	3.25	30.00
XSD White Doty. White	Med.	L. Pomp.	Nov. 1	3.25	30.00
XD* White Anemone. White	Tall	Int. Anem.	Nov. 5	3.25	30.00
XS Rev. Horace Bushnell. White	Tall	Int. Pomp.	Nov. 8	3.25	30.00
XD Shasta. White	Med.	Int. Anem.	Nov. 8	6.00	50.00
X*Crystal Jewell. White	Tall	S. Pomp.	Nov. 8	3.25	30.00
XD White Mensa. Ivory white	Med.	Int. Sgl.	Nov. 10	3.25	30.00
XPD Little America. Snow white	Med.	Int. Anem.	Nov. 10	3.25	30.00
X Chicago Pearl. Finest clear white	Med.	Int. Pomp.	Nov. 15	3.25	30.00
D Irene Hayes. White	Med.	L. Anem.	Nov. 15	4.00	37.50
D White Freida. White with yellow cushion	Med.	L. Anem.	Nov. 15	8.00	75.00
* Bobbie. Large creamy white	Med. Tall	S. Pomp. L. Anem.	Nov. 18 Nov. 18	3.25 3.25	30.00
Pearl. White	Tall	Int. Pomp.	Nov. 20	4.00	37.50
X Early Garza Supreme.	Short	Int. Anem.	Nov. 25	3.25	30.00
XPD White Yuletide	Short	Int. Pomp.	Nov. 28	3.25	30.00
X Cordova. White	Med.	Int. Dec.	Nov. 30	3.25	30.00
Royal Queen. White	Med.	Int. Pomp.	Dec. 5	3.25	30.00
X Silver Star. White	Tall	Int. Pomp.	Dec. 10	3.25	30.00
Yukon. XD White Supreme. White suffused with pink	Tall Med.	Int. Sgl. L. Anem.	Dec. 10 Dec. 10	8.00 3.25	75.00 30.00
X December Glory. (Pompon) White	Med.	Int. Dec.	Dec. 15	3.25	30.00
X Garza Supreme.	Short	Int. Anem.	Dec. 15	3.25	30.00
X Snow. Ivory white	Med.	Int. Pom.	Dec. 30	4.00	37.50
BRONZE	& R	ED			
* Clara Jameson. Dark reddish bronze	Mad	S. Pomp.	Oct. 15	3.25	30.00
XP Bonnibell. Orange buff		S. Pomp.	Oct. 15	3.25	30.00
Carlina Lee. Reddish bronze		Int. Dec.	Oct. 15	3.25	30.00
XS Roman Bronze. Bronze. Sport from Capt. Cook	Tall	Int. Pomp.	Oct. 20	3.25	30.00
X Adelaide. Mahogany	Med.	S. Pomp.	Oct. 23	3.25	30.00
XSD Jemima. Bronze	Med.	Int. Pomp.	Oct. 23	3.25	30.00
X Natoma. Flame scarlet	Short	Int. Dec.	Oct. 25	4.00	37.50
P* Ethel. Bronze		S. Pomp.	Oct. 25	3.25	30.00
XS*Firebird. Red bronze	Med.	Int. Dec.	Oct. 25	3.25	30.00
X Bronze Daisy. Light bronze		Int. Sgl.	Oct. 25	3.25	30.00
16	()				

Pompons, Single & Anemone Varieties

BRONZE & RED (Continued)

	Name and Description	Height	Size & Type	Matures	Pric	ce per 1000
D	Bronze Doty. Bronze		Int. Pomp.	Nov. 1	3.25	30.00
D	Absolute. Scarlet bronze	Med.	Int. Sgl.	Nov. 1	3.25	30.00
X	Elizabeth Peterson. Orange bronze	Med.	Int. Dec.	Nov. 3	3.25	30.00
	Bronze Buckingham. Bronze.	Short	Int. Sgl.	Nov. 3	3.25	30.00
XS'	Robin Hood. Dark red	Med.	S. Pomp.	Nov. 5	3.25	30.00
XD	Red Rover. Crimson orange	Short	L. Sgl.	Nov. 5	3.25	30.00
X	Red Daisy. Deep red	Med.	Int. Sgl.	Nov. 5	3.25	30.00
	Bronze Bulkeley. Bronze		Int. Pomp.	Nov. 8	8.00	75.00
	Peggy Poesch. Brilliant apricot		L. Dec.	Nov. 10	3.25	30.00
XD1	Mason's Bronze. Burnt orange		L. Sgl.	Nov. 10	3.25	30.00
XP	Tagoya. Brilliant goya red	Short	Int. Sgl.	Nov. 10	3.25	30.00
AD	Clara Holford. Deep red	Med.	L. Sgl.	Nov. 10	3.25	30.00
XD	Mason's Red. Orange center	Short	L. Sgl. L. Anem.	Nov. 10 Nov. 10	8.00 3.25	75.00
D	Cora Scovil. Burnt orange	Med.	L. Anem.	Nov. 10	4.00	30.00 37.50
XD	The Titan. Scarlet crimson		L. Anem.	Nov. 10	3.25	30.00
	New York. Bronze.	Med.	S. Pomp.	Nov. 13	3.25	30.00
	Bronze Masterpiece. Apricot bronze		Int. Pomp.	Nov. 15	12.00	100.00
	Fez. Deep bronze.	Med.	S. Pomp.	Nov. 15	3.25	30.00
	Flambeau. Golden bronze	Med.	S. Pomp.	Nov. 15	12.00	100.00
XSP	Princeton. Golden yellow suffused with orange	Med.	Int. Dec.	Nov. 15	3.25	30.00
X	Mrs. Mary Hooker. Deep red	Tall	L. Dec.	Nov. 15	3.25	30.00
X	Red Princeton. Brazil red	Med.	Int. Dec.	Nov. 15	3.25	30.00
XPD	Melba. Light reddish bronze	Short	L. Sgl.	Nov. 15	3.25	30.00
	Vagabond. Apricot buff		Int. Sgl.	Nov. 15	8.00	75.00
	Red Melba. Red	Short	L. Sgl.	Nov. 15	3.25	30.00
	Bronze Freida. Salmon buff		L. Anem.	Nov. 15	8.00	75.00
XP	November Bronze. Orange bronze	Med.	Int. Pomp.	Nov. 18	3.25	30.00
V 4	Catherine. Bronze	Med.	Int. Dec.	Nov. 20	3.25	30.00
X	Legal Tender. Bronze and gold	Med.	Int. Dec.	Nov. 20	3.25	30.00
	Afterglow. Rust bronze.	Med.	Int. Sgl.	Nov. 20 Nov. 20	8.00	75.00
XD*	Estrelita. Deep buff bronze	Med.	Int. Sgl. L. Anem.	Nov. 20	3.25	75.00 30.00
	Rolinda. Orange bronze		Int. Anem.	Nov. 23	3.25	30.00
	Red Rolinda. Deep reddish bronze	Med.	Int. Anem.	Nov. 23	3.25	30.00
	Apricon. Apricot yellow		Int. Pomp.	Nov. 25	8.00	75.00
XPD	Sunburst. Sunburst orange		L. Sgl.	Nov. 25	3.25	30.00
	Yolanda. Pale orange bronze	Med.	S. Anem.	Nov. 25	3.25	30.00
XPD	Crimson Glow. Maroon	Med.	Int. Anem.	Nov. 25	3.25	30.00
X	Bronze Beauty. Bronze	Med.	Int. Pomp.	Nov. 25	3.25	30.00
	Dorothy Turner. Bronze	Med.	Int. Pomp.	Nov. 25	3.25	30.00
	Bristolite. Bronze		Int. Pomp.	Nov. 25	3.25	30.00
	Glow. Orange. Reddish orange at center		Int. Pomp.	Nov. 30	3.25	30.00
	Carnelia. Red		L. Sgl.	Nov. 30	3.25	30.00
X	Royal Crimson. Dark crimson		L. Dec. Int. Sgl.	Dec. 1 Dec. 1	3.25 4.00	30.00 37.50
XD		Short	L. Anem.	Dec. 1	3.25	30.00
X	Chrome Emerald. Golden orange	Short	Int. Anem.	Dec. 1	3.25	30.00
	Wildfire. Orange rust	Med.	Int. Dec.	Dec. 3	3.25	30.00
	Harmony. Red orange with bronze shading		Int. Pomp.	Dec. 5	3.25	30.00
	Cavalcade. Mandarin red. Golden bronze re-	110	Int Danie	Dec 10	2 25	20.00
	verse	Med. Tall	Int. Pomp. Int. Sgl.	Dec. 10 Dec. 10	3.25 4.00	30.00 37.50
XPD	Bronze Supreme. Light bronze		L. Anem.	Dec. 10	3.25	30.00
	Sarong. Bright scarlet		Int. Sgl.	Dec. 15	8.00	75.00



Pompons, Single & Anemone Varieties (Continued)

PINK

	Name and Description	Height	Size & Type	Matures	100	1000
XSP:	* Jewell. Bright rose pink	Short	S. Pomp.	Oct. 15	3.25	30.00
P	Dark Pink Jewell. Dark pink. Sport from Jewell	Short	S. Pomp.	Oct. 15	3.25	30.00
:	* Pink Pearl. Pink	Med.	S. Pomp.	Oct. 20	3.25	30.00
	Capt. Cook. Pink	Tall	Int. Pomp.	Oct. 20	3.25	30.00
	Persian Rose. Rose pink	Short	Int. Pomp.	Oct. 23	3.25	30.00
	Jessie (Madeline) Deep rose pink	Med.	Int. Pomp.	Oct. 25	3.25	30.00
	October Pink. Medium pink		Int. Sgl.	Oct. 25	3.25	30.00
	* Nellie Kleris. Lavender pink	Tall	L. Pomp.	Oct. 25	3.25	30.00
	Pink Dot. White with pink center	Med.	Int. Pomp.	Oct. 25	3.25	30.00
	* Betty Rose. Pink petals and cushion	Med.	L. Anem.	Oct. 25	3.25	30.00
	* Rising Sun. Pink	Med.	Int. Pomp.	Oct. 23	3.25	30.00
	Isobel, Light layender	Short	S. Pomp.	Nov. 1	12.00	100.00
VD					3.25	30.00
	Irene Rich. Pink		L. Pomp.	Nov. 1		
	*Lillian Doty. Shell pink		L. Pomp.	Nov. 1	3.25	30.00
	Rose Charm. Rose pink		L. Pomp.	Nov. 1	3.25	30.00
	W. H. Buckingham. Pink	Short	Int. Sgl.	Nov. 3	3.25	30.00
	Topknot. Creamy white cushions—pink petals	Med.	Int. Anem.	Nov. 5	3.25	30.00
XS	Mrs. Morgan G. Bulkeley. Light pink	Tall	Int. Pomp.	Nov. 8	3.25	30.00
	Linda Lou. Lavender	Med.	Int. Anem.	Nov. 8	6.00	50.00
	Thyra. Dark pink	Med.	L. Pomp.	Nov. 10	3.25	30.00
D	Elsa Piel. Orchid pink—cushion tinged with					
	gold	Med.	L. Anem.	Nov. 10	3.25	30.00
XD	Tuxedo. Pink	Med.	L. Anem.	Nov. 10	3.25	30.00
XS	Silver Tips. Bright pink with silver tips	Med.	Int. Pomp.	Nov. 13	3.25	30.00
XD	Masterpiece. Tourmaline pink	Med.	Int. Pomp.	Nov. 15	3.25	30.00
P	Fairy Queen. Orchid pink	Short	Int. Sgl.	Nov. 15	3.25	30.00
XP	Orchid Beauty. Orchid with golden cushion	Med.	Int. Anem.	Nov. 15	3.25	30.00
	Freida. Light lavender with yellow cushion		L. Anem.	Nov. 15	3.25	30.00
D	Dark Pink Freida. Dark pink	Med.	L. Anem.	Nov. 15	8.00	75.00
	Norma. Orchid petals with salmon cushion	Tall	Int. Anem.	Nov. 18	3.25	30.00
	Dark Pink Norma. Deep lavender	Tall	Int. Anem.	Nov. 18	3.25	30.00
	Purple Daisy. Deep amaranth		S. Anem.	Nov. 20	12.00	100.00
	Western Beauty. Pink	Short	Int. Dec.	Nov. 20	3.25	30.00
PD	Long Island Beauty. Pale pink with yellow		200.	. 101. 20	,	30.00
	cushion	Med.	L. Anem.	Nov. 20	3.25	30.00
Y	Usona. Pink	Med.	Int. Pomp.	Nov. 25	3.25	30.00
	Hasegawa Pink, Lavender	Med.	Int. Folip.	Nov. 25	3.25	30.00
	Beautiful Lady. Deep lavender rays with cream	med.	mt. sgi.	1404. 23	3.45	30.00
ALD	cushion	Short	L. Anem.	Nov. 25	3.25	30.00
XD	Valencia. Orchid pink	Tall	L. Sal.	Nov. 30	3.25	30.00
	Dark Pink Valencia. Deep orchid pink	Tall	L. Sgl.	Nov. 30	4.00	37.50
^	Pagosa. Dark pink		Int. Pomp.	Dec. 5	3.25	30.00
	Amaranthea. Purplish crimson		Int. Pomp.	Dec. 10	3.25	30.00
	Tonquin. Rose color		Int. Pomp.	Dec. 10	3.25	30.00
	Prosperity. Deep lavender		Int. Dec.	Dec. 10	4.00	37.50
XD	Dark Pink Supreme. Lavender		L. Anem.	Dec. 10	3.25	30.00
	Pink Treasure Island. Light lavender	Med.	Int. Dec.	Dec. 20	3.25	30.00

Pot Plant Varieties

PLEASE NOTE SYMBOLS USED FOR THIS CLASS

The varieties listed below include those of all types which have been found most suitable for pot culture. Types are indicated by Sgl.—Single; Anem.—Anemone; Dec.—Decorative; Pomp.—Pompon; Inc.—Incurved. Size of flower is indicated by S—Small; Int.—Intermediate; L—Large; and L.F.—Large Flower commercial.

X—Extra good or generally accepted best varieties.

S-Indicates varieties we find most suitable for shading.

*—Indicates varieties resistant to Verticillium blight.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

YELLOW

Spray or

Blooming

Price per

Name and Description	Type I	Disbud	Date	100	1000	
Golden Spray. Yellow	Int. Pomp.	Spray Spray Disbud Spray Disbud	Sept. 15 Sept. 20 Oct. 1 Oct. 15 Oct. 20	\$3.25 7.00 3.25 3.25 4.00	\$30.00 65.00 30.00 30.00 37.50	
Rodell Judith Anderson. Yellow Yellow Caprice. Yellow Smith's Superlative. Golden Yellow. Nuggets. Best early yellow. Yellow Izola. Buff yellow. Ohio State. Yellow Golden Glory. Golden yellow Lila Lilly. Lemon yellow. Yellow Beauty. Golden yellow Lois. Golden yellow Sunray. Yellow Yellow Fellow. Yellow. Bonnaffon DeLuxe. Golden yellow. Bright Light. Bright yellow. Yellow Rolinda. Deep golden yellow.	L.F. Dec. S. Pomp. S. Anem. Int. Anem. L.F. Incurv. Int. Anem. L. Pomp. S. Pomp. S. Anem. Int. Dec. L.F. Incurv. L. Dec. Int. Anem. L.F. Dec.	Spray Spray Dis. or Spr. Disbud Spray Disbud Disbud Disbud Disbud Disbud Spray Spray Dis. or Spr. Disbud	Oct. 20 Oct. 25 Oct. 25 Oct. 25 Oct. 25 Nov. 1 Nov. 1 Nov. 10 Nov. 10 Nov. 15 Nov. 15 Nov. 18 Nov. 20 Nov. 20 Nov. 25 Nov. 25	3.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25	30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00	
٧	VHITE					
Irene. White	S. Pomp. L.F. Incurv.	Spray Spray Disbud	Oct. 10 Oct. 15 Oct. 20 Oct. 25	3.25 3.25 3.25	30.00 30.00 30.00 30.00	
Mary Pickford. White	S. Pomp. S. Anem.	Spray Disbud Disbud	Nov. 1 Nov. 1 Nov. 10	3.25 3.25 3.25 3.25	30.00 30.00 30.00	
BRONZE & RED						
Bonnibell. Orange buff	S. Pomp. Int. Pomp. Int. Dec. Int. Dec.	Spray Disbud Spray Spray Disbud Disbud Spray	Sept. Oct. 1 Oct. 15 Oct. 20 Oct. 20 Oct. 20 Oct. 25 Oct. 25	3.25 3.25 3.25 3.25 3.25 3.25 3.25	30.00 30.00 30.00 30.00 30.00 30.00 30.00	
	Early Yellow. Yellow Sport from Early Bronze Pomponette. Primrose yellow. Gold Lode. Golden yellow. Golden Spray. Yellow. Cincinnati. Golden yellow. Rodell Improved. Yellow. Sport from Rodell Judith Anderson. Yellow. Yellow Caprice. Yellow. Smith's Superlative. Golden Yellow. Nuggets. Best early yellow. Yellow Izola. Buff yellow. Ohio State. Yellow. Golden Glory. Golden yellow. Lila Lilly. Lemon yellow. Yellow Beauty. Golden yellow. Lois. Golden yellow. Sunray. Yellow Yellow Fellow. Yellow Fellow. Yellow Fellow. Sunnaffon DeLuxe. Golden yellow. Bright Light. Bright yellow. Yellow Rolinda. Deep golden yellow. Sun Gold. Yellow. Sunshine. Yellow White Jewell. White suffused with pink. Irene. White Christiana. White, sport from Rose Chochard Graceland. White with yellow center. Mary Pickford. White White Izola. White. Sport from Izola. Richard Mandel. Pure white. BRON Early Bronze. Orange bronze. Bronze Lode. Light bronze. Sport from Gold Lode Bonnibell. Orange buff. Thorina. Reddish bronze. Carlina Lee. Reddish bronze. Kathleen Thompson. Bronze.	Barly Yellow. Yellow Sport from Early Bronze Pomponette. Primrose yellow. Int. Pomp. L.F. Dec. Golden Spray. Yellow. Int. Pomp. Cincinnati. Golden yellow. Sport from Rodell Improved. Yellow. Sport from Rodell Improved. Yellow. Sport from Rodell Int. Pomp. Int. Pomp. Yellow Caprice. Yellow. Sport from Rodell Int. Pomp. Yellow Caprice. Yellow. Int. Dec. Smith's Superlative. Golden Yellow. L.F. Dec. Nuggets. Best early yellow. S. Pomp. Yellow Izola. Buff yellow. S. Pomp. S. Anem. Ohio State. Yellow. Int. Anem. Golden Glory. Golden yellow. L.F. Incurv. Lila Lilly. Lemon yellow. Int. Anem. L. Pomp. Lois. Golden yellow. S. Anem. Int. Anem. L. Pomp. Sunray. Yellow Solden yellow. S. Anem. Int. Dec. Sunshine. Yellow Int. Anem. L. Pomp. Sun Gold. Yellow. Int. Dec. L. F. Incurv. Bright Light. Bright yellow. L. F. Incurv. L. F. Dec. Int. Anem. Mary Pickford. White suffused with pink. S. Pomp. Christiana. White, Sport from Rose Chochard. L. F. Incurv. Bronze. White with yellow center. Int. Anem. Mary Pickford. White with yellow center. Int. Anem. Mary Pickford. White Sport from Izola. S. Anem. Richard Mandel. Pure white. Sport from Gold Lode. Light bronze. Int. Pomp. Carlina Lee. Reddish bronze. Int. Dec. In	Early Yellow. Yellow Sport from Early Bronze S. Pomp. Spray Pomponette. Primrose yellow. Int. Pomp. Spray Gold Lode. Golden yellow. L.F. Dec. Disbud Int. Pomp. Spray Cincinnati. Golden yellow. L. Pomp. Disbud Rodell Improved. Yellow. Sport from Rodell Improved. Yellow. Sport from Rodell Improved. Yellow. Sport from Rodell Int. Dec. Dis. or Spray Yellow Caprice. Yellow. Int. Dec. Dis. or Spr. Smith's Superlative. Golden Yellow. S. Pomp. Spray Yellow Irol. Dec. Dis. or Spr. Smith's Superlative. Golden Yellow. S. Pomp. Spray Yellow Izola. Buff yellow. S. Anem. Disbud Ohio State. Yellow. Int. Anem. Disbud Int. Dec. Dis. or Spray Yellow Fellow. S. Anem. Spray Spray Yellow Fellow. Yellow. Int. Dec. Dis. or Spr. Sunray. Yellow Yellow. Int. Dec. Dis. or Spr. Sun Gold. Yellow. Int. Anem. Dis. or Spr. Sun Graceland. White suffused with pink. S. Pomp. Spray Spray White Izola. White. Sport from Rose Chochard. White with yellow center. Int. Anem. Dis. or Spr. Mary Pickford. White. Sport from Izola. S. Anem. Disbud Disbud National Reddish bronze. Sport from Gold Lode. Light bronze. Sport from Gold Lode. Light bronze. Sport from Gold Lode. Dec. Disbud Dis	Bronze S. Pomp. Spray Sept. 15 Pomponette. Primrose yellow Int. Pomp. Spray Sept. 20 Gold Lode. Golden yellow L. F. Dec. Disbud Oct. 1 Golden Spray. Yellow Sport from Rodell Improved. Yellow Sport from Spray Oct. 25 Yellow Caprice. Yellow Int. Dec. Disbud Oct. 25 Smith's Superlative. Golden Yellow S. Anem. Disbud Nov. 1 Ohio State. Yellow Int. Anem. Disbud Nov. 1 Ohio State. Yellow Int. Anem. Disbud Nov. 1 Ohio State. Yellow Int. Anem. Disbud Nov. 1 Lila Lilly. Lemon yellow Int. Anem. Disbud Nov. 10 Lois. Golden yellow S. Anem. Spray Nov. 15 Surray. Yellow S. Anem. Spray Nov. 15 Yellow Fellow, Yellow Int. Dec. Disbud Nov. 20 Pright Light. Bright yellow Int. Dec. Disbud Nov. 20 Bright Light. Bright yellow Int. Anem. Disc or Spr. Nov. 18 Bonnaffon DeLuxe. Golden yellow Int. Anem. Disc or Spr. Nov. 18 Bonnaffon DeLuxe. Golden yellow Int. Anem. Disc or Spr. Nov. 18 Christiana. White, sport from Rose Chochard Spray Nov. 20 Sun Gold. Yellow Int. Anem. Disc or Spr. Nov. 20 Sunshine. Yellow Int. Anem. Disc or Spr. Nov. 20 Bright Light. Bright yellow center. Int. Anem. Disc or Spr. Nov. 20 WHITE White Jewell. White suffused with pink S. Pomp. Spray Oct. 15 Spray Nov. 10 BRONZE & RED Early Bronze. Orange bronze Sport from Gold Lode Light bronze. Sport from Gold Lode Sport from Gold Lode Light bronze. Sport from Gold Lode Sport From Gold Lode Sport Sport From Gold Lode Sport Sport From Gold Lode Sport Sport Spray Oct. 15 Thorina. Reddish bronze. Int. Dec. Disbud Oct. 20 Carlina Lee. Reddish bronze. Int. Dec. Disbud Oct. 25	Bronze	

Pot Plant Varieties BRONZE & RED (Continued)

				Blooming		e per	
X X X X	Autumn Glow. Bronze red	Int. Dec. L.F. Dec. S. Anem. Int. Sgl. L. Sgl. L. Sgl. S. Anem. Int. Anem. Int. Anem. Int. Dec. S. Anem.	Disbud Dis. or Spr. Disbud Disbud Dis. or Spr. Disbud Disbud Spray Dis. or Spr. Disbud Disbud	Nov. 1 Nov. 1 Nov. 1 Nov. 5 Nov. 5 Nov. 5 Nov. 15 Nov. 20 Nov. 20 Nov. 25 Nov. 25 Nov. 25 Nov. 30	3.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25	30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 75.00 30.00	
	PINK						
x x x x	Jewell. Bright rose pink	L.F. Incurv. L.F. Incurv. Int. Pomp. Int. Pomp. L. Pomp. S. Anem. S. Anem. Int. Sgle. L. Pomp. Int. Anem. S. Anem.	Spray Disbud Disbud Spray Disbud Dis. or Spr. Disbud Dis. or Spr. Disbud Dis. or Spr. Disbud Dis. or Spr. Disbud Dispud Dispud Spray Spray	Oct. 10 Oct. 15 Oct. 20 Oct. 20 Oct. 20 Oct. 20 Oct. 25 Nov. 1 Nov. 1 Nov. 5 Nov. 5 Nov. 10 Nov. 12 Nov. 15 Dec. 10	3.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25	30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00 30.00	

Japanese Mountain or Cascade Varieties

X-Extra good or generally accepted best varieties. P-Indicates varieties suitable for Pot Plants.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO

	Name and Description	Size & Type	Matures		ce per 1000
	Anna. Pure white				
XP	Jane Harte. Yellow				
	Chushin. Bright red with yellow center		Oct. 30		50.00
	Firefall. Deep red		Oct. 30		50.00
	Lilac Veil. Purple		Oct. 30 Oct. 30	6.00	50.00 50.00

Hardy or Garden Varieties

- X-Extra good or generally accepted best varieties.
- S-Indicates varieties we find most suitable for shading.
- P-Indicates varieties suitable for Pot Plants.
- -Indicates varieties resistant to Verticillium blight.

Hardy or Garden Varieties (Continued)

YELL	.ow			р.	
Name and Description	Height	Туре	Matures	100	1000
Pygmy Gold. Golden yellow		Button	Sept. 5	\$3.25	\$30.00
Algonquin. Golden yellow	Med.	Decor.	Sept. 5	3.25	30.00
Yellow Cushion. Light buff yellow	Short	Semi-dble.	Sept. 10	3.25	30.00
X* Barbara Cumming. (Yellow Normandie). Yel-					
low shading to bronze	Med.	Decor.	Sept. 15	3.25	30.00
P Early Yellow. Yellow. Sport from Early Bronze Eugene A. Wander. Golden yellow	Short	Button	Sept. 15	3.25	30.00
X* Wolverine. Yellow	Med.	Decor. Decor.	Sept. 20 Sept. 25	15.00 3.25	125.00 30.00
Sappho. Bright lemon yellow	Med.	Single	Sept. 25	3.25	30.00
King Midas. Light lemon yellow	Med.	Decor.	Sept. 30	3.25	30.00
Acacia. Pale lemon vellow	Med	Semi-dble.	Sept. 30	7.00	65.00
Gleam O'Gold. Pale lemon yellow	Short	Decor.	Oct. 1	7.00	65.00
Orion. Canary yellow	Med.	Single	Oct. 5	3.25	30.00
* Ceres. Old gold	Med.	Single	Oct. 10	3.25	30.00
Yellow Spoon. Lemon yellow		Spoon	Oct. 10 Oct. 10	4.00	37.50 37.50
Yellow Irene. Light yellow	Med.	Spoon Button	Oct. 18	3.25	30.00
XSP Rodell Imp. Light yellow	Med.	Button	Oct. 20	3.25	30.00
XP Judith Anderson. Yellow		Button	Oct. 25	3.25	30.00
WH	ITE				
				Pri	ce per
Name and Description	Height	Туре	Matures	100	1000
Pocatello.	Short	Semi-dble.	Sept. 5	4.00	37.50
Seminole. Cream white		Decor.	Sept. 5	3.25	30.00
Teton.		Single	Sept. 5	4.00	37.50
White Cushion. (Queen Cushion)		Semi-dble.	Sept. 10	3.25	30.00
White Gull. Tasiva. Cream white		Button Decor.	Sept. 15 Sept. 15	3.25 3.25	30.00 30.00
X Jean Cumming. White		Decor.	Sept. 20	3.25	30.00
X* Normandie. White	Short	Decor.	Sept. 20	3.25	30.00
Milky Way. Cream white	Med.	Semi-dble.	Sept. 25	12.00	100.00
Niobe. White with light yellow disc	Med.	Semi-dble.	Oct. 5	3.25	30.00
White Spoon. White		Spoon	Oct. 10	4.00	37.50
Uvalda. Cream White	Med.	Decor.	Oct. 10	3.25	30.00
White Jewell. White tinged with light lavender Silver Ball.		Button Decor.	Oct. 15 Oct. 15	3.25	30.00 30.00
Irene.		Button	Oct. 18	3.25	30.00
BRONZE	& R	ED			
Geronimo. Buff orange	Short	Decor.	Aug. 25	3.25	30.00
Absaraka. Light bronze		Single	Aug. 25	4.00	37.50
Ann Miller. Orange red		Decor.	Aug. 25	3.25	30.00
Bronze Cushion. (King Cushion). Buff bronze	Short	Semi-dble.	Sept. 10	3.25	30.00
X Aladdin. Bronze		Decor.	Sept. 10	3.25	30.00
XP* Early Bronze. Bronze		Button	Sept. 10	3.25	30.00
Red Cushion. Uinta. Bright reddish bronze		Semi-dble. Semi-dble.	Sept. 10 Sept. 15	3.25 4.00	30.00 37.50
Flashlight. Crimson		Decor.	Sept. 13	3.25	30.00
* Nancy Copeland. Spectrum red	Med.	Single	Sept. 25	3.25	30.00

Short

Med.

X* Frances Whittlesey. Rich bronze and garnet.... Short

Romany. Reddish bronze..... Med.

Sandra. Deep crimson..... Short

Autumn Lights. Coppery bronze.....

Little Bob. Dark reddish bronze.....

Sept. 30

Sept. 30

Early Oct. Oct. 5 Oct. 5

Oct. 1

Oct. 1

Oct. 5

3.25

7.00

3.25

3.25

3.25

3.25

3.25

3.25

30.00

65.00

30.00

30.00

30.00

30.00

30.00

30.00

Decor.

Button

Decor.

Decor.

Single

Decor.

Decor.

Semi-dble.

Hardy or Garden Varieties

BRONZE & RED (Continued)

Name and Description	Туре	Spray or Disbud	Blooming Date	Pri 100	ce per 1000
Mandarin. Coral salmon	Med.		Oct. 10 Oct. 10	3.25 3.25	30.00 30.00
*Apollo. Bronze red. *Ember. Coral and orange bronze Clara Jameson. Dark reddish bronze XP Bonnibell. Light buff bronze XS Cavalier. Vermillion red Red Flare. Deep red X* Indian Summer. Bronze	Med. Med. Med. Med. Short Med. Med. Med. Med.	Spoon Single Decor. Button Button Single Button Decor.	Oct. 10 Oct. 12 Oct. 15 Oct. 15 Oct. 15 Oct. 15 Oct. 15 Oct. 25	4.00 3.25 3.25 3.25 3.25 3.25 3.25 3.25	37.50 30.00 30.00 30.00 30.00 30.00 30.00 30.00
PI	NK				
Clara Curtis, Salmon pink	. Short . Short . Med. . Short . Med. . Med.	Single Semi-dble. Semi-dble. Decor. Decor. Decor. Decor.	Aug. 28 Sept. 10 Sept. 15 Sept. 25 Sept. 25 Oct. 1 Oct. 1	8.00 3.25 7.00 3.25 3.25 3.25 3.25	75.00 30.00 65.00 30.00 30.00 30.00 30.00
salmon	. Med. . Med.	Decor. Decor.	Oct. 1 Oct. 5	15.00 7.00	125.00 65.00
rose Lavender Lady. Lavender Pink Spoon. Lavender X Benoit. Deep lavender Orchid Spoon. Light pinkish lilac Rose Spoon. Old rose Symphony. Mauve, coppery pink & lavender X Ganna. Bright pink Daphne. Pink XS Jewell. Lavender	Short Med. Med. Med. Med. Med. Med. Med. Med.	Semi-dble. Decor. Spoon Decor. Spoon Decor. Decor. Decor. Single Button	Oct. 5 Oct. 8 Oct. 10 Oct. 10 Oct. 10 Oct. 10 Oct. 12 Oct. 12 Oct. 12 Oct. 15	7.00 8.00 4.00 3.25 4.00 4.00 3.25 3.25 3.25 3.25	65.00 75.00 37.50 30.00 37.50 37.50 30.00 30.00 30.00 30.00
P Dark Pink Jewell. Deep lavender. Sport from Jewell		Button	Oct. 15	3.25	30.00





Pictures a bench of the orange bronze mum Apricot Queen black-cloth shaded in a house protected with Flexo-glass. Shading was begun July 30th, photoed Oct. 7. For large mums at this late date a few steam pipes are necessary with us for possible frost and excess moisture. Apricot Queen flowers normally about Nov. 1. Flowered at this early date the color is deep gold or tan yellow, a rich shade. The attractive personalities are our Secretary "Helen" and Sales Manager "Charley." The white Mums on the right are Albatross that we think highly of, flowering naturaally, around Nov. 1.

Grog Ball

ON GROWING MUMS

We should divide this subject into two phases, the professional growing of a uniformly good crop and the business or economic end. Close attention to both is necessary if we are to make a profit. Space will not permit extended cultural notes, but here are a few fundamentals. Fresh or sterilized soil is safest for this crop. Old greenhouse material that has been heavily manured for several years is dangerous unless steamed or leached with hot water. We prefer old soil treated this way, to fresh material; but if steaming is not convenient, better use fresh, outdoor soil, but remember that changing is three to five times as costly as steaming if properly equipped to do so.

For black cloth shading the planting must be done earlier than when flowered normally, because, after buds are set, stems do not lengthen greatly. For plenty long flower stems a July shading of pompons should stand 16-18 in. tall at least when shading starts. We have planted cuttings the middle of June of November varieties, and had them plenty tall to shade Aug. 15, but to flower them the last half of September calls for mid-May planting, and mid-July shading for most October varieties. On the other hand, if benches are occupied by a profitable crop thru June, it is well to know that cuttings or June propagated young stock can produce a nice grade of unshaded flowers if varieties are used that don't tend to produce vegetative or blind growth,. The principal

cause of such growth is excess soil moisture and fertility. Quite late planting also encourages blind growth. The problem of keeping down midge, aphis, and the disease known as VERTICILLIUM is a costly one. Midge can only be cleaned up thru regular, thoro fumigating or spraying, but verticillium can only be controlled by carefully selecting disease - free stock plants and planting in sterilized or clean soil. This supplies two good reasons for sterilizing soil. Also, some varieties are much

more resistant to VERTICILLIUM than others. We are designating such in this catalog with *. Some varieties will also be found more resistant to midge than others, but this seems to vary with culture. Where deep or ground beds are used, drainage is another important factor. In water-logged soil growth might take on the yellowing symptoms of Verticillium and be mistaken for it, but complete drainage is fundamentally necessary for any crop. When a soil remains overwatered too long, air circulation is interfered with, causing the yellowing of growth. We believe that one reason for the superior growth we get thru gravel culture is due to the much more complete aeration the roots enjoy thru this method, that draws air in and out of the gravel at regular intervals.

In large or standard mums the demand is generally for medium size flowers such as produce two to a plant spaced 7x10 or 11 in. Spacing 7x8, one flower to a plant, we find not so profitable, tho it generally results in more uniformly large flowers. On the other hand, some retail growers find it more profitable to space about 8x10 and grow 4-6 flowers to a plant for the good reason that you can, as a retailer, usually net more from the half dozen smaller flowers than one or two larger ones.

In England they are largely grown 10-12 to a plant while for the Paris Market, the bigger they are, the better, and so demands vary in our own country.



This variety, Peggy Ann Hoover, might be of more value as an attraction than any on the list, something different, here it is.

SHADING FOR EARLINESS

Supplementing suggestions already made on this subject we call special attention to the use of sound or new cloth for shading. Most material when used a few seasons does not shut out enuf light. This sometimes seriously delays bud setting. The use of a rubberized cloth tends to shut out air circulation, encouraging the spread of rot. This can be overcome by removing or lifting the side cloth. Should it become increasingly difficult to get suitable cloth, it might be well to know that a good grade of kraft paper can be used and that if cared for it will hold up 2-3 seasons. We bought our supply of this in 1940 from the Sisalkraft Co., 205 W. Wacker Drive, Chicago. at 22c per sq. yd. Mums are what are known as "short day" plants which means that bud

formation is brought on by shortening fall days. If the days did not shorten growth would continue without bud formation. This is proven by delaying bud formation with artificial lights. To bring about bud formation shade is applied at 5 P.M. and removed at 7 A.M. At 5 P.M. total darkness is of course not attained with shade. The degree necessary might be referred to as fairly dark. Measured by a light meter the light should not exceed 2 ft. candles. If greater, bud setting will be delayed accordingly. The shade is maintained on pompons until the latest buds show color. With the large standards shade should be applied until buds are about 1/2 in. in diameter. From 3-4 weeks shading is usually necessary. Approximately 60 days from the start of shading is necessary to fully developed flowers, but this will vary the naturally early varieties making it some earlier.



Here's Sisalkraft paper "on the job"-The end of the house in the foreground is already covered, while a roof roll is being pulled down over the side of the house. The chap manipulating the ropes is "Bob" Goetz, grower in charge.

We do not recommend the earliest shading to start much before July 15, for the demand for mums is not very active before mid-Sept. We suggest starting shade with a limited area on the above date, starting another lot July 25. flowered before Sept. 15 in our latitude there is danger of loss thru high temperatures softening flowers which invites decay under excessive moisture conditions. Unless naturally hard standards are used there is some danger after Sept. 15: but after this date weather is generally favorable and demand active.

TO DELAY FLOWERING

This procedure is the reverse of black cloth shading for early setting of buds. It is sometimes of considerable value in extending the flowering period of especially well liked kind.

It is accomplished thru prolonging daylight with electric lights as already sug-

Grog Ball

gested. For mid-season kind, turn on lights about Aug. 20. For December varieties, start a week later. Do not start later, or finished stock will tend to have long necks and sometimes, malformed flowers. Use 40 Watt bulbs with reflectors. Space lights 5 feet and high enuf to spread the light well over the bed. Turn lights on when darkness is reached and for 3 hours daily. Continue the lighting for three-fourths as many days as it is wished to delay flowering; in other words, if you wish to defer flowering 20 days, keep the lights on them 15 days. It is not considered practical to delay flowering more than 3 or 4 weeks. Take first bud showing after light treatment stops.



"October Pink" the new single that doesn't lose its color when shaded. Heavy producer, clear rose pink. That's John Jacobs, West Chicago, Illinois, the grower on the right.

ECONOMIC QUESTIONS

Tho this crop occupies bench space largely during summer when overhead is low, the profit in it is usually close and unless costs are watched, the margin in it might easily disappear. We are not plugging for high-priced novelties when we say the question of varieties is important. While it is somewhat determined by local demands, it must be remembered that some kind are quite generally better than others. We have tried to designate such in this catalog. Our long list is necessary because some growers find certain kind do well with them, and they insist on calling for them, tho others might be better. Some of the inferior ones we have been carrying, and that we are sure are superseded, have been dropped from this list. Also, don't overlook the value of the Singles and the Anemones. Some, especially in the new ones, are quite attractive, and in your interest, we do not hesitate to say that some new ones in all classes should be tried annually; for none are sent out that are not at least an improvement with the originator.

In our own experience we find a substantial advantage in two ways to have all our plant stock in the form of rooted cuttings. First there is a saving of half or

more in cost of a cutting, over early propagated stock. Easy to figure this out. Secondly, an unchecked rooted cutting will start off and grow more freely and be more resistant to disease than early stock that has been transplanted twice, topped and more or less checked. We use the first lot of early cuttings to plant out for later cuttings. We try to have all cuttings in the sand a month to six weeks before date for planting. If cuttings are potted or planted out 3-4 weeks before planting, they should receive little or no check in replanting. The extra labor and space involved should be balanced by extra growth. but avoid early propagated stock.

COST OF CUTTINGS

An increasing number of growers who maintain cost records are finding it profitable to pass all responsibility for their cuttings over to us. We furnish them perfectly rooted the day you want to plant. It is significant to note that all of our large buyers of 50 to 100,000 cuttings, each, are among the most successful growers. In figuring the actual cost of cuttings you must go further than making and sticking them in the sand; \$5.00 per 1000 should cover that. First cost is space covered with stock plants all winter. We figure

this worth 50-60c per sq. ft. Next figure cost of insecticides. Then we all spend something for stock plants of new or standard varieties, and when it gets warm during April-May there is usually some loss in the sand with any grower. Also, when propagating usually the least desirable varieties are the heaviest cutting producers, tempting us to overdo on them. while when ordering requirements you will have exactly what your fall made notes tell you what should be used and this changes some annually. Sometimes this means considerably, one way or the other. Another indirect cost is that of propagating during the most crowded season—the spring months, when costly neglect of something is the rule with most of us. Figure it all up and you will find that under present labor conditions, well rooted, clean cuttings will cost you around \$30.00 per thousand. When successfully produced in quantity by a specialist this figure can of course be reduced some, but we don't believe the average grower can or does much reduce this cost figure.

POT PLANTS

The demand for well grown pot plants is clearly increasing. Whether this is due to increasing business or the lasting quality of mums, it is important to appreciate and take advantage of it. Of first importance is an unchecked start. To assure this plant use well rooted, clean cuttings, 3-4 of

them in a 5 to 6 in. pot. While this calls for some care in watering, it cuts out the costly job of repotting which is necessary. Also to assure a nicely balanced plant, space the cuttings well. Most growers do this planting in June and 3 pinches are usually required. The first one is made 2-3 weeks after planting. The second, about 30 days after planting; the last pinch after the breaks from the second get to drawing out and is usually made in August, and if the breaks have drawn considerably and are soft, pinch rather hard. Remember that the finished plants of

the small flowered kind shouldn't exceed 12-18 in., while the disbuds should not exceed 18 in., and to get maximum size to flowers and value in plants, attend to disbudding large flowering ones timely. The general feeding principles that apply to bench crops should be somewhat intensified with pot plants, especially after they become well pot bound, and at this stage it is even more important to watch watering closely. From most sections comes an increasing demand for largeflowered classes for pots, but the medium size "disbuds," especially adapted to this purpose are most popular. The most suitable varieties for pot plant purposes are indicated thus "P."

In addition we offer the following list as most popular for this purpose:

STANDARD

Albatross Alemeda Ambassador (White) Apricot Queen Blazing Gold Bonnaffon DeLuxe Christiana Detroit News Friendly Rival Glitters Gold Lode Golden Glory Good News Helen Frick

Honey Dew Indianapolis Pink Justrite Marketeer Mefo Monument Mrs. H. E. Kidder Mrs. David F. Roy Mrs. A. J. Stahelin Rose Chochard Saratoga Smith's Superlative Sun Gold Thanksgiving Pink



Nice bed of Pink Dot grown in our Aster cloth house. Cuttings planted May 10; shaded July 10 to Aug. 10; photo taken Sept. 20. We consider Pink Dot one of the finest varieties for this early outdoor shaded crop.



Standard List for Pot Plants (Continued)

POM POM

MEDIUM SIZE-DISBUDS

Clara Jameson Dark Pink Jewell Dorothy Turner Ethel Golden Splendor Golden Spray

Autumn Glow

Bright Light

Judith Anderson

Ethrelda

Gypsy

Graceland

Irene

Minong Nuggets Rodell Imp. Silver Ball Silver Bells Thorina White Jewell

Ohio State

Persian Rose

Pink Beauty

Red Gold

Queen of the Pink

Richard Mandel

Kathleen Thompson Lila Lilly Little America Margo Melba

Sunray Thyra White Izola Yellow Beauty

HARDY GARDEN VARIETIES

Aladdin Albert Muller Algonquin Ann Miller Barbara Cummings Red Cushion Clara Curtis Geronimo Granny Scovill Gypsy Girl

Jean Cummings Jean Treadway Pink Cushion (Amelia) Pygmy Gold Ruth Cummings Francis Whittlesey Yellow Cushion Yellow Spoon Wolverine White Cushion



House of Silver Sheen. Benched first week in May. Shaded beginning July 15th. This photo taken about Sept. 10th.



In a $2\frac{1}{2}$ in. pot. Unless planted out or reported soon, it will become checked.

Top at about this stage and depth.

Just from the field in a 21/2 in. plant band.

CARNATION VALUES INCREASING

Due to better colors, stems and size, Carnations are more than coming back-they are going ahead, and if managed with consideration for their requirements they are profitable. We must start with early propagating, not later than January, for we clearly find that a strong Dec. started plant will be more profitable than two late propagated ones planted together. And if you are starting out with young stock free of the germs of stem rot you will keep free of it by sterilizing the potting as well as the bench soil. Also, in field planting do not use the same soil more often than necessary. And plant well hardened stock in the field early as is safe to do so. We use an overhead sprinkling system which safe guards them against some freezing. Also, we get all our planting finished early in July as possible. We prefer to grow our young stock in 2½ in. plant bands, planting in the field with bands. This enables us to lift them with roots intact as shown in cut on right. And here is another fundamental point. If your present stock is at all sick, especially with stem rot, it will pay and pay well to replace it with clean, vigorous stock from growers who specialize in producing such, and to keep such stock clean, use only sterilized or clean soil in all stages of their growth.

CARNATIONS

Instructions for Ordering

Our terms are net 60 days to persons of approved credit standing.

There are no quantity or cash discounts on carnations cuttings.

On our per 1000 cutting price we will furnish 250 at the 1000 rate.

On our per 100 cuttings price we will furnish 25 at the 100 rate except where noted.

Orders for less than 25 of a kind of carnation cuttings can not be taken.

To get the 1000 rate—250 or more cuttings must be ordered of each variety wanted. Vis:—We can not furnish ten lots of 100 each at the 1000 rate.

Carnations are always shipped express collect. This we believe is the safest method of transportation. Remember the Express company is liable for the safe arrival of your cuttings.

PATENTED CARNATIONS

When a grower develops a new Carnation by hybridization or discovers a sport that he believes is a new and distinct type, he may apply for a patent to the U.S. Bureau of Patents. If this Patent is granted, he has the right to sell this Carnation under any restriction he cares to make.

Most introducers of Patented Carnations sell them by having the purchasers sign an agreement simlar to the following:

"We agree to propagate only in such quantity as we will need for our own planting. We will neither sell, trade nor give away any plants or materials which might be used for propagating, and we will make every reasonable effort to prevent such material from leaving our premises. We further agree to destroy all plants produced in excess of our own needs for planting."

When this agreement is signed, the owner of the patent grants the purchaser the right to propagate without limit for his own use.

All our packages have this label →

This box was inspected and accepted by the Express Company for shipment. Therefore, if there is any damage enroute, from being broken or frozen, call your express agent to inspect the same, marking on express receipt the condition of the package and amount of damage, etc., then you file claim, as our responsibility ceases when carrier accepts shipment.



Seth Parker

NEW CARNATIONS

1942 Introductions

The descriptions of the new and recent introductions of Carnations are those of the originators. We believe they are honest in their claims and that these varieties have proved of exceptional merit in the section where they have been grown. It is, however, a well-known fact that many new Carnations do much better in some sections of the country than they do in others.

Study the list below. We feel that any Carnations, whose descriptions appeal to you, are worthy of a trial. Some of them seem to have exceptional merit.

DARK PINK PETER FISHER

A sport of Peter Fisher. Originated with Neuhauser & Troyer in Lancaster County, Pennsylvania. It is a good Ward color, has same habit and productiveness of its parent. Growers who like Peter Fisher will want this one. \$12.50 per 100, \$100.00 per 1000. No restrictions.

NEW CARNATIONS

1942 Introductions (Continued)

FIRE CHIEF (Pat.)

A sport of King Cardinal. It has 25% more petals, deeper rich red color, same vigorous growing habit of its parent. \$20.00 per 100, \$150.00 per 1000.

SETH PARKER

The new crimson Carnation. Looks like a winner, not as dark as Woburn. (Patented) \$20.00 per 100, \$150.00 per 1000.

Pollyanna. Picture taken December 3, 1940.





1942 Introductions (Continued) STAR DUST (Pat.)

A strong sturdy grower, fine stem, clear white, large flowers. It may be the large commercial white for which every Carnation man is searching. A number of large growers have already placed sizeable orders for it. \$20.00 per 100, \$150.00 per 1000.

Recent Outstanding Introductions

WHITE PETER FISHER

A pure white sport of the popular favorite, Peter Fisher. Both plants and flowers are like those of the parent plant. The bloom resembles an improved flower of the variety Ivory, but of course the stem and foliage is much heavier. It is a clean and vigorous variety, easy to grow and entirely satisfactory. \$8.50 per 100, \$75.00 per 1000.



Sea Shell. See next page for description.

BEUERLEINS CRIMSON

Color rich crimson, medium size flowers 3 to 31/2 inches, one of the finest of our newer seedlings. Calyx never bursts. Prolific grower, very early and steady producer. \$4.00 per 25, \$6.50 per 50, \$12.00 per 100, \$100.00 per 1000.

CHARM

Laddie Seedling. An outstanding Carnation, slightly darker than Laddie, almost as large and produces almost twice as many blooms. Exceptionally good keeper. \$20.00 per 100, \$150.00 per 1000.

MARCHIONESS OF HEADFORT

The petals are a cream white, melting into a ground color of rich, reddish orange. It is an English variety of the Pelargonium type. It is a good grower, a good producer and has a nice fragrance. \$6.00 per 25, \$11.00 per 50, \$20.00 per 100, \$150.00 per 1000.



CARNATIONS

Recent Oustanding Introductions (Continued)

POLLYANNA

A very productive salmon flesh colored pink. Medium sized bloom, excellent stem, looks like a good "bread and butter" variety. \$15.00 per 100. \$125.00 per 1000. Patented.

SCARLET KING

This is a sport of Pelargonium, but is a better grower than Pelargonium, and is freer and has a more outstanding color. The petals are a creamy white with centers of bright red. It is a beautiful Carnation. This variety and the Marchioness of Headfort seem destined to push Pelargonium out of the picture. \$6.00 per 25, \$11.00 per 50, \$20.00 per 100, \$150.00 per 1000.

SEA SHELL

A well formed flower of a delicate shell pink. Vigorous grower, good stem and easy to do. Seems best in this color class. \$9.00 per 100, \$80.00 per 1000.

The Well Known Standard List

WHITE

Gardenia. Olivette. Patrician. Puritan. Snow White. Star Dust. White Fisher. White Maytime.	Large exhibition white. Beautiful and superior white. Good sized white of high quality. Fine "bread and butter" white. Large full show-quality white. See 1942 Introductions. Prolific sport of Peter Fisher. Very profitable pure white.	\$ 8.00 8.50 5.00 5.00 7.50 8.50 7.50	\$75.00 75.00 45.00 45.00 65.00 75.00 65.00
Willow May office.	very promable pure wince.	1.00	00.00
	SALMON PINK		
Berkshire Hills. Charm (Pat.). Eleanor. Giant Laddie. Pollyanna (Pat.). Salmon Spectrum Supreme.	Light salmon pink. Large Laddie shade. Good light salmon pink. Salmon sport of Laddie. New light salmon pink.	$\begin{array}{c} 6.00 \\ 20.00 \\ 6.00 \\ 9.00 \\ 15.00 \\ 6.00 \end{array}$	$\begin{array}{c} 50.00 \\ 150.00 \\ 50.00 \\ 80.00 \\ 125.00 \\ 50.00 \end{array}$
	LIGHT PINK		
Hermosa. Maytime. Ruth Hengstenberg. Seashell. Virginia.	Lovely new light pink. Prolific rich shell pink. Virginia color but larger. New light shell pink. Well known light pink.	8.50 7.00 6.00 9.00 6.00	75.00 60.00 50.00 80.00 50.00
	MEDIUM PINK		
Dark Pink Virginia. Peter Fisher. Pink Treasure (Pat.). Virginia Rose.	Medium pink sport of Virginia. Prolific rose or medium pink. Rich pink, large flower. Medium pink sport of Virginia:	8.50 6.00 20.00 8.50	$75.00 \\ 50.00 \\ 150.00 \\ 75.00$



DARK PINK

	DAKK PINK		
Clark's Beauty. Dark Pink Maytime. Dirigo. John Briry. New Deal Ward. Rosalie (Pat.).	Does well in some localities. Fine Ward colored sport. Good quality deep pink. Large attractive rich pink. Well known deep pink. Large and beautiful pink.	6.00 8.50 7.50 15.00 6.00 20.00	$\begin{array}{c} 50.00 \\ 75.00 \\ 65.00 \\ 125.00 \\ 50.00 \\ 150.00 \end{array}$
	RED		
Barbara Farr. Fire Chief (Pat.). King Cardinal (Pat.). Spectrum Supreme.	Scarlet sport of Spectrum. Deeper color than King Cardinal. Beautiful rich scarlet. Scarlet.	7.00 20.00 10.00 6.00	$\begin{array}{c} 60.00 \\ 150.00 \\ 100.00 \\ 50.00 \end{array}$
	CRIMSON		
Beurlein's Crimson. Johnson's Crimson. Joyce. Potentate. Rigoletto. Royal Purple (Pat.). Seth Parker (Pat.). Woburn.	Fine new crimson. Most prolific crimson. Beautiful large free crimson. Rich purple crimson. An old favorite. Rich dark color. New rich crimson. Good crimson of high quality.	12.00 6.00 10.00 6.00 5.00 12.00 20.00 7.00	$100.00 \\ 50.00 \\ 90.00 \\ 50.00 \\ 45.00 \\ 100.00 \\ 150.00 \\ 60.00$
	YELLOW		
Maine Sunshine.	Clear yellow.	7.00	60.00
N	OVELTIES AND VARIEGATED		
Barbara Brigham. Chief Kokomo (Pat.). Coronet. Dairymaid. Dimity. Golden Wonder. Improved Delicacy. Lochinvar. Marchioness of Headfort. Moonbeam. Pelargonium. Pharaoh. Scarlet King. Silverlyn. Yellow Gold (Pat.).	Pretty orange variegated. The old standby. Yellow variegated. The best pink and white. White marked with deep claret. Leading yellow variegated. Fine white variegated. Garnet with orchid edge. Cream shading to orange red. Yellow, faint pink markings. Delightful orchid novelty. Beautiful large orange variegated. White with bright red center. Pink with silver edges. Sold under year agreement. Small flower, good producer.	See price on p	75.00 90.00 60.00

CARNATION PLANTS 21/4" Pots and Field Grown Plants

During the months of April-May-June we have a supply of many of the varieties listed in this catalog from $2\frac{1}{4}$ " pots.

In June and July we can furnish Field Grown carnations.

Write us how many, what kinds and when you wish them delivered.

If you order them early enough, we will grow them especially for you. You can then secure almost any variety, in any quantity, in either 21/4" or field grown plants.

Our prices are not high, when the quality of our plants is considered.



SUMMER CARNATIONS

Charley Newbold. (Taken from Sept., 1941 Grower Talks)

A test planting of Carnations here at West Chicago to be grown under cloth in the Spring of 1941 was arranged for last Fall. We took some cuttings in the latter part of November of Peter Fisher, Puritan and King



The writer inspects Peter Fisher Carnations under cloth at West Chicago. Planted outside early May in Plant Bands. Photo taken August 12th. First flowers cut July 25th, making a nice supply of carnations in the off-season.

Cardinal. As soon as these cuttings were rooted, they were placed in our regular $2\frac{1}{2}$ " wooden plant bands and carried in these bands in flats until early May and then planted in bands in the cloth house with the idea of having blooms during the summer when there are no Carnations being cut from the greenhouses. There were approximately 420 Peter Fisher plants for this test. These were planted 7x9" in ground beds. By ground beds we mean directly on the ground, no side boards and no benches of any kind. We also planted 420 Puritan and just 18 King Cardinal at the same time.

These were grown along and were only given one feeding of 5-15-5, florist mixture. This was applied at the rate of four pounds to a hundred square feet of bench surface. All plants grew well under these conditions, but Peter Fisher was outstanding in that it started to flower much earlier than Puritan or King Cardinal. They started blooming the end of July and we will get three to five flowers from each plant before the first of September. There is a second crop coming up from below from which we may cut another crop of flowers providing we do not have a severe frost early this season. The stems of Peter Fisher average about 24". They are strong, stiff and the flower is almost equal to size of our winter cut. The flower apparently does not fade as rapidly as Peter Fisher does in the greenhouses along in March and April.

The results of experiments so far this summer have been considered fairly satisfactory. We are going to attempt several more beds next year

Grog Ball

but instead of planting the plants 7x9 we will plant them 6x7 and try to start making the cuttings by the middle of October. In this way we will pinch them for a crop to come in, if possible, around the middle of July. If we should succeed in getting a crop at that time, we believe the second crop will undoubtedly come before severe cool wather in the Fall. The Puritan does not show as much possibilities as the Peter Fisher and they seem to be slower. The stem is weaker under the cloth than it is in the greenhouse and the flower is relatively smaller as compared with our winter blooms that are the flowers of Peter Fisher which were compared with flowers that bloomed in the greenhouse at the same time last winter. The planting of King Cardinal is a very small one as you know. They are growing as well as Puritan but will bloom later than Peter Fisher. King Cardinal being red, it is almost impossible to keep the Thrip from damaging the blooms to a certain extent in the summer.

These Carnations we are referring to are still in the wooden bands and it is possible that after it is too cold to keep them outside we may place them in a cool house and may still get a fairly good crop off of these plants this coming spring. The accompanying photograph shows the general appearance of the Peter Fisher plants that we refer to. It will give you the idea of the number of flowers and length of the stems. We believe that any Carnation grower who has a cloth house might do well to test out some of his plants in the manner referred to above.



BALL RED BOOK 5th Edition By Geo. J. Ball

Exactly 50 yrs. growing experience with miscellaneous crops is gathered into this paper bound booklet. Two hundred and twenty-five subjects are treated in this new edition. We gladly mail it to our customers for the cost of printing and mailing which is 30c.

SEED SOWING

By Geo. J. Ball and Geo. Jr. All practical phases of this popular subject are fully gone over in this booklet. Added to it is a complete table giving the number of seeds per given weight, time and temperature required for germination and longevity of 400 varieties of Florist Flower Seeds. Sent gratis with any order.

GRAVEL CROPS AND SUB-IRRIGATION 2nd Edition Vic Ball

Besides latest slants on gravel, it covers sub-irrigation of both pot plants and bench crops—directions, pros and cons, our own experiences with it. You should be informed on these promising new developments. 56 pages, freely illustrated. Price 10c.





CARNATIONS IN GRAVEL

Carnations have proved one of the crops most adaptable to gravel culture. This is very well illustrated in the two pictures shown on this page. The above illustration shows a small portion of our planting about two weeks after benching. At the left can be seen the identical bench as it appeared this fall. As you can see, the growth is very good, and there are an abundance of flowers. With several years experience behind us, we can't help but be enthusiastic about what the future holds for gravel culture and carnations. Last season, the quality as well as the quantity of flowers left little to be desired. Add to this the very definite saving in labor and more profitable carnation crops should follow. The few cases of failure that have come to our attention where this method of culture was followed have been in moving the plants from the field to the bench. Our conclusion, based on our own experiments and the work of others is that at least a part of the soil should be left on the plants as they are benched. With this precaution and some care in watering, they should come through without any trouble.



"Vic" on left, and John Bonhard, in charge.

GRAVEL CULTURE

We are using this revolutionary method to the extent of a 300 ft. house of Carnations this season. Our last season's experience with it clearly showed a saving of 25% in production cost, but it needs close watching and some experience. We feel certain of its future. Glad to have you look over our gravel planting.

Better Mums for 1942 Gro. g. Ball
in c.
West chicago
illinois

Better Carnations for 1942

Talks Grower

NOVEMBER, 1941

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"Information Please"

'Are you willing to say what, according to your opinion or records, it costs to produce Mum cuttings?"—Michigan.

Gladly, why not? But they probably won't agree with most records or "opinions" because of the general lack of cost accounting and failure to consider all factors entering into their cost. We assume that first class, well rooted cuttings are referred to. If only the labor of making, sticking the cuttings into the sand, and watching them until rooted is counted, the cost will be around \$5.00 per thousand, depending on the season and labor conditions. During the busy spring months the cost will be some higher. The next cost is that of the space occupied by stock plants from say Nov. until June. Only way to determine this is to figure value of a crop that would occupy this space during that period. In doing this we should estimate from 50 to 60 cents per square ft. Next cost figure is that of insecticide and time used applying it. Some allowance should be made for stock plants, for we cannot fail to annually try other varieties. Some indirect costs that are slight but usually certain during spring propagation is loss of cuttings thru rotting in sand, loss thru not determining in the fall exactly the list of varieties you should have, and having them in one uniform size the day you figure on planting them. This item can become considerable when we figure that early propagations must be potted or planted out and when planting time comes are in various sizes and degrees of hardness. Still another indirect loss is the fact that the spring months when propagation is at its height, we are most pressed with other work and usually something suffers, so, when all these factors of cost are fully allowed for, and we are only fooling ourselves when we don't count them, we find the cost of well rooted cuttings to be between \$25.00 and \$30.00 per thousand. These figures are based on the average grower's setup. When the business of producing these cutting's is well organized, and managed, and propagation is carried out on a large scale, the cost is

"My All-Double Blue Brocade petunias are not at this time (Sept.) of course lowered. flowering nearly as free as are other varieties. Can you explain?"-

I cannot definitely say why this sometimes seems to be true. The Illinois. season it was entered in the All America trials-we noted this behavior in a middle west trial ground and were somewhat scared of it, but it flowered almost normally well in all other All America trials

[2]

Above is a page from our monthly publication "Grower Talks." We try to make this of service by suggesting crops that should be started for each month of issue. Also travel and other notes of interest to growers.